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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,129	09/30/2003	Jun Eui Chang	1594.1266	3827
21171	7590	09/10/2004	EXAMINER	
STAAS & HALSEY LLP SUITE 700 1201 NEW YORK AVENUE, N.W. WASHINGTON, DC 20005			PHAM, MINH CHAU THI	
			ART UNIT	PAPER NUMBER
			1724	

DATE MAILED: 09/10/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/673,129

Applicant(s)

CHANG ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 7/22/04 & 9/30/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by McDonald (5,984,990).

McDonald teaches an air cleaning apparatus (10) comprising a cabinet provided with a top panel (12) of a predetermined area, a blowing unit (30) installed in the cabinet, and a filtering unit (28) installed in the cabinet to remove impurities from air circulated by the blowing unit (30).

Claim 7 is rejected under 35 U.S.C. 102(b) as being anticipated by Lewis et al (5,435,837).

Lewis et al teach an air cleaning apparatus comprising a fan casing mounted in an upper portion (12) of a cabinet (11) with a blowing fan (42) installed in the fan casing to circulate air to an air discharging port which is provided on the sidewall of the fan casing, a filter casing (23) mounted under the fan casing (42) and provided with at least one filter (27) and a guide unit (20, 21 and 22) provided between the filter casing and an inner surface of the cabinet to support the filter casing (23) in the cabinet (11) so that the filter casing is drawn out from the cabinet in a horizontal direction (see Fig. 1).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2-5, 8-15 and 17-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald (5,984,990), in view of Lewis et al (5,435,837).

McDonald discloses an air cleaning apparatus (10) comprising a cabinet provided with a top panel (12) of a predetermined area, a blowing unit (30) installed in the cabinet, and a filtering unit (28) installed in the cabinet to remove impurities from air circulated by the blowing unit (30). Claims 2-5, 8-15 and 17-30 differ from the disclosure of McDonald in that the air cleaning apparatus has a fan casing which can be slidable on the guide rails so that the fan casing is drawn out from the cabinet in the horizontal direction. Lewis et al disclose a filter casing (23) slidable on the guide unit (20, 21 and 22) so that the filter casing is drawn out from the cabinet in a horizontal

direction. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the fan casing of McDonald to be slidable on the guide rails as taught by Lewis et al in the air cleaning apparatus of McDonald so that it would be easier to provide access to the fan casing for maintenance or routine check-out of the fan.

Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over McDonald (5,984,990), in view of Lewis et al (5,435,837), and further in view of Rosen (5,525,136).

Claims 6 and 11 call for a multilayered filtration in the filter casing. Rosen discloses a multilayered filtration including a filter (50) comprising of a fiber media mat having an entering air face (54) and leaving air face (52) wherein the fibers are packed more densely on the leaving air face (52) than on the entering air face (54) permitting the accumulation of larger particles at the air entering face of the filter and the filtration of the finer particles on the more closely packed air-leaving face (col. 4, lines 21-30), and an electrostatic filter (40). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a multilayered filtration as taught by Rosen in the filter casing of McDonald and Lewis et al since multiple layered of the filtration media would increase the filtering efficiency of the filter to capture all different sizes of particulates in the dirt laden air passing through.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Wallace et al (6,036,736) disclose a ventilating apparatus.
- Greisz (5,730,770) discloses a two stage air filter.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**Minh-Chau Pham**  
**Patent Examiner**  
**Art Unit: 1724**  
**September 7, 2004**